

KNOWLEDGE

VOL 7 DECEMBER 2013

OFFICIAL SAFETY INFORMATION OF THE U.S. ARMY

WINTER'S UNSEEN TRAP



ARMY STRONG.

FROM THE CSM DAYS OF OLD, DAYS OF NEW

Nearly 600 Soldiers died in accidents in 1979, the year I joined the Army. Unbelievably, that was an improvement from the previous year, when we recorded just shy of 700 accidental fatalities. Those are unconscionable numbers by today's standards, but back then, it was just the way things were. More than a decade passed before accidental losses tapered significantly, and far too many tragedies occurred in the meantime.

Thankfully, in today's Army, safety is the new normal. We no longer accept accidents as the cost of doing business or that "Soldiers will be Soldiers" in their off-duty time. Personal accountability has become a hallmark of our profession for Soldiers at all levels, and safety has consequently become an entrenched part of our everyday lives. I'm lucky to have witnessed this turnaround firsthand; the 1979 me couldn't have imagined the profound impact safety would have on my career or the lives of our Soldiers.

At any given time, leadership can be the most frustrating or most rewarding job in the Army, and some days it's both. But without a doubt, the historic low in accidental fatalities we achieved during fiscal 2013 was a victory for leaders everywhere. It was the culmination of a lot of hard work and more than a little frustration at the Army expecting us to do one more thing in the middle of this event called war. Reducing accidents while fulfilling our combat roles seemed impossible, but we did it both in theater and at home. That's what my grandmother called gumption, and you — our leaders, from the top to the bottom of the chain of command — possess it in spades.

I couldn't be more proud of all of you, especially as my time in the Army draws to a close. Every day I've spent with Soldiers has been a humbling, awe-inspiring experience, and I'm better for it. If I've learned anything after 35 years in the uniform, it's this: You have to listen to your Soldiers. Some leaders are born intuitive while others have to work harder at it, but wherever you fall on the spectrum, simply listening and reading between the lines will tell you most of what you need to know. This is an especially important attribute in safety, because it's rare that a Soldier will tell you he or she is acting in a risky manner. If you know your Soldiers, chances are you'll know when they're in trouble without them stating it.

While I transition out of the Army and toward retirement during the next few months, Command Sgt. Maj. Leeford Cain will be assuming my roles and responsibilities at the USACR/Safety Center. I have no doubt he will be a tremendous asset to the organization and our Soldiers, just as he's been at every previous assignment. Leeford is coming to us from U.S. Army Garrison, Ansbach, Germany, bringing with him many years of experience as a command sergeant major at the brigade and battalion levels. I know him personally and wholly believe he is the right choice to fill this position at this critical juncture. Please welcome Leeford in January and let him know what you need from him to keep your Soldiers safe.

It's been a long time coming, but now we know our Army can't thrive when risk runs unchecked through our ranks. Your tireless efforts for safety show in everything from all missions being performed to standard to a battle buddy calling a cab for a fellow Soldier after a night of drinking. We can't go back to the Army of 1979; we have nowhere to go but forward from here, into a future where no Soldier has to die in a preventable accident.

Goodbyes are bittersweet, and I will miss you all. But remember it's your turn — to lead, to shine, to make a real difference in a Soldier's life. Before you know it, 35 years will have come and gone and you'll be where I am today. And you'll realize, just as I have, that your Soldiers are the greatest legacy you could ever leave behind. Don't waste this precious opportunity, this gift called leadership.

Army Safe Is Army Strong!

RICK STIDLEY

Command Sergeant Major
U.S. Army Combat Readiness/Safety Center



ARMY STRONG.



WINTER'S UNSEEN TRAP

CHIEF WARRANT OFFICER 3 DANE W. PEDERSEN
Detachment 22, Operational Support Airlift Agency
Pennsylvania National Guard
Annville, Pa.

As an officer and aviator in the U.S. Army, I — like most of you — have been exposed to a significant amount of safety training. We've all learned that the unseen hazard is oftentimes the most dangerous. For example, Field Manual 3-04.301 (1-301), Aeromedical Training for Flight Personnel, highlights Type I (unrecognized) spatial disorientation as the most dangerous because the hapless aviator has no idea they are disoriented, and thus, takes no action to correct the danger facing them. Carbon monoxide is similarly insidious. Whether it is exhaust leaking into your vehicle, or perhaps a propane heater warming a tent, carbon monoxide takes its prey with no warning. However, this article is not about spatial disorientation or carbon monoxide. There is another hazard that's similarly treacherous and just as veiled. Unfortunately, I found myself in its trap on my way home from drill one weekend.

It was a pleasant and cloudless Sunday afternoon on a drill weekend, a welcomed change from the sub-freezing, overcast, low-pressure area that had blanketed the Keystone State just a day earlier. Now, south central Pennsylvania was awash in sunlight, and the mercury had peaked near 40 F — improved weather indeed. Following formation, I made my way to the parking lot that had been cleared of the foot of snow that fell the day prior. I hopped in my Toyota pickup, fastened my seat belt with a reassuring click and set out on my hour and 10 minute commute home.

As I made my way south down the highway, the cruise control set at 65 mph and a local news station emanating from the small dashboard speakers, I looked forward to the Sunday evening dinner at my parents' house. Mom was preparing lasagna, and my brother was heading over as well. It was setting up to be an enjoyable end to a busy weekend of training. After 55 minutes of driving, I flicked up the stalk on the steering column, signaling my exit from the highway and my entrance onto the state route that would carry me to a warm plate of lasagna just 10 minutes away.

As I entered the state route and accelerated, something to the left caught my eye. I glanced through the light tinting of the driver-side window and saw the bright-orange digits of the local bank clock, which read 5:30 p.m. Then, in typical fashion, the time was quickly replaced by the outside air temperature — 34 F. I thought nothing of it, but, in hindsight, should have.

As I left the suburbs and entered the country, the sun had just slipped behind the hills. The vibrant orange of the sky and white of the fields was being sapped away, leaving only cold, gray dimness. I watched as familiar landmarks passed by — the old cemetery on left, the small business that specialized in flagpoles and signage on the right and the dilapidated wood barn that leaned awkwardly to one side as it strained under a heavy load of decaying hay stored there decades ago. I rounded the barn and entered a mild right-hand turn that was followed by a slightly sharper turn to the left. During normal road conditions, this turn was not so sharp as to require slowing down. Unfortunately, the road conditions were not normal.

I completed the left-hand turn and had just straightened the steering wheel when something felt odd. My faithful truck was not heeding my inputs. The truck was not straightening. I thought, "Is this just my imagination?" It was barely perceptible; yet, there I was, slowly — but unmistakably — approaching the double-yellow line. I tweaked the steering wheel a little more to the right to attempt a correction, but the truck continued to disobey.

As I crossed the double-yellow line, my hands gave up and my feet went into action, mashing the brake to the floor. Nothing ... just sliding along. At this point, I was in a 3,000-pound version of one of those 25-cent kiddie car rides in front of the local grocery store, complete with an ineffectual steering wheel and brake pedals installed for entertainment purposes only. I was three-quarters into the oncoming lane and continuing my intrusion when a red Ford Escort, driven by a woman in her 50s, crested the hill not 400 feet in front of me. The next three seconds seemed like an eternity. When the countdown ended, the indescribable forces on the body and the agonizing gnashing of metal began.

I remember standing outside my mangled truck with someone. They were encouraging me to lie down, but I resisted. I glanced around painfully. My body ached all over. People gathered. I stumbled toward the Ford Escort. That same insistent person again asked me to lie down. Once more, I resisted. At the Escort's driver-side door, with shattered glass crunching under my



ARMY STRONG.



combat boots, I bent over and peered inside to ensure the woman was all right. I was expecting she would be — after all, I was ambulatory. However, she was not all right. Her legs were broken badly beneath the collapsed dashboard and she had a nasty gash in her forehead.

I was pulled away and taken to the side of the road by a passerby who happened to be a paramedic. I remember the Jaws of Life tearing at her car in an attempt to release her from the jagged metal cabin. I remember the helicopter landing in a nearby field, awaiting her extrication. I remember a state police officer stepping out of his cruiser and slipping on the pavement, nearly falling, as he approached me. I remember people murmuring and looking down at the road surface, motioning with their feet as if feeling for something. I remember someone saying the words “black ice.”

Black ice had trapped me. It was just as deceptive and dangerous as Type I spatial disorientation and carbon monoxide. You don’t realize you are in a deteriorating situation until it is too late.

So how can you avoid this dangerous winter hazard? Let’s use the risk management process. The first step is to identify the hazard. But that’s a problem. Like carbon monoxide, black ice is very difficult to detect. The road simply looks wet. Actually, it was wet at one point — until the temperature dropped or the sun went down, forming a thin, translucent glaze of ice. So, unless you plan on stopping your vehicle every 20 feet to feel the road, identifying black ice directly is not practical. What we can do, however, is identify the conditions leading to the formation of black ice.

In order for ice to form, there has to be a source of moisture. Anything that could make the road surface wet, or simply damp, is all it takes. There are too many to discuss here, but rain, mist, flurries and water runoff are likely sources. So what caused the road to be wet on the afternoon I had my accident? Remember, the skies were clear blue the entire day. A large amount of snow did fall the day prior, and although the road crews and the sun had completely cleared the roads, there were numerous piles still along the shoulders. Because of the relatively warm temperatures the day of the accident, the piles of snow began melting and running across the road surface, varnishing the black asphalt in a thin glossy film of water. The first condition was met.

The second condition needed is freezing or near-freezing temperatures. Take note that I said “near-freezing” temperatures. It is possible for black ice to form even if the air temperature is several degrees above freezing. This can occur if the air warms suddenly after a cold spell that has left the surface of the roadway well below freezing. In other words, the air is above freezing, but the road is not (this is why some late-model vehicles will alert the driver to the potential for hazardous road conditions, usually at about 35 F). In my case, the road was probably just above freezing during the day because of heat from the sun. But as soon as the sun was low on the horizon, shadows fell and the water runoff froze.

Now that we have identified the hazard, let’s complete the risk management process. Using Figure 1-4 in FM 5-19, Composite Risk Management, and given the conditions above, I would assess the risk at high to extremely high. When developing controls, you might reduce your speed, travel earlier in the day when temperatures are warmer, select a different route home and/or use studded winter tires (although these still may not prevent sliding). You might even want to consider avoiding the drive all together and staying in base lodging or a battle buddy’s house if available. It is better to arrive safely the next day than not at all. And, whatever you do, wear your seat belt. I firmly believe I would not be here today without my seat belt. Finally, make your decisions, implement your controls and continue to supervise and evaluate throughout your chosen course of action.

Black ice is a sinister, unforgiving and potentially deadly winter hazard that is almost impossible to detect while driving. By identifying the conditions leading to its formation and using the risk management process to reduce the risk, you can likely avoid sliding into its trap.



ARMY STRONG.



DECK THE FALLS

MARK BUDHOO

72nd Field Artillery Brigade

Joint Base McGuire-Dix-Lakehurst, N.J.

One beautiful January day, I decided it was time to remove the Christmas lights from my roof. I set up the ladder on my composite deck, leaning it against the roofline. I knew composite decking is very slippery and doesn't offer a desirable surface to set a ladder, but I'm a guy that likes to get the job done, so I continued. Besides, I had help. My wife was going to hold the ladder, but she came outside in flip-flops. Once her toes felt the frigid air, she quickly went inside to change her shoes.

While she was gone, I started without her. As I climbed the ladder, it didn't feel stable. Unfortunately, I ignored that voice in my head that told me I should wait for my wife and proceeded to remove the lights. As I leaned toward the roof, I pushed down on the top rail of the ladder, causing it to slide across the deck. Then I lost my balance and fell about eight feet to the ground. At the hospital, I was diagnosed with a torn trapezius muscle. My reward for disregarding my personal safety: two days of quarters and 10 days of light duty. Adding insult to injury, the lights were still on my roof.

Each year, 12,500 people are treated at hospital emergency rooms for injuries much like mine due to falls, cuts and shocks related to holiday lights and decorations, according to the Consumer Product Safety Commission. The CPSC recommends using caution when removing outdoor holiday lights. The following tips can help keep you safe when using a ladder.

- Never pull on lights when removing them. They could unravel and inadvertently wrap around power lines.
- Make sure the weight your ladder is supporting does not exceed its maximum load rating (user plus materials). There should only be one person on the ladder at a time.
- Use a ladder that is the proper length for the job. The suggested length is a minimum of three feet extending over the roofline or working surface.
- Never stand on the top three rungs of a straight, single or extension ladder. Straight, single or extension ladders should be set up at about a 75-degree angle.
- All metal ladders should have slip-resistant feet.
- Metal ladders will conduct electricity, so use a wooden or fiberglass ladder near power lines or electrical equipment. Do not let a ladder made from any material contact live electric wires.
- Be sure all locks on extension ladders are properly engaged and the ground underneath is level and firm. (Here's a good idea: Large flat wooden boards braced under a ladder can level it on uneven ground or soft ground.)
- Have a helper hold the bottom of the ladder, and never place a ladder in front of a door that isn't locked, blocked or guarded.
- Keep your body centered between the rails of the ladder at all times. Do not lean too far to the side while working and refrain from stepping on the top step or bucket shelf.
- Make sure that the rungs are intact and free of dirt and paint buildup that could interfere with footing.
- When extending or retracting an extension ladder, hold the pulley rope firmly. If the rope is released, the upper section could drop on your fingers, arms or feet. Make sure that the tops of both rails make solid contact with walls and that both legs make solid contact with the floor or ground. Place foam protectors or wads of cloth on the tops of extension ladders to prevent them from sliding and to protect the walls.
- Be sure to empty your pockets before climbing a ladder. Knives, scissors or other pointed tools could cause injury.



KNOWLEDGE

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

- Do not push or pull too hard with a scraper or other tools while balanced on the ladder.
- Always wear rubber-soled or another type of non-slip shoe on a ladder. Avoid working in wet or windy weather, and do not climb a wet ladder.

Falls from ladders can cause serious injuries and even death. Following ladder safety procedures every time you climb the rungs will help keep you at home with family this holiday season rather than the emergency room.

FYI

Falls from ladders are preventable. For more information about ladder safety, visit <https://www.osha.gov/Publications/OSHA3625.pdf>.



ARMY STRONG.



ARE WE THERE YET?

CHIEF WARRANT OFFICER 2 PAUL WENDZEL
C Company, 2-147th Aviation Regiment
Iowa Army National Guard
Boone, Iowa

It was a fairly straight-forward, routine mission; pick up a VIP and staff, fly to two bases 45 minutes apart for meetings, then return home. Weather for the time of flight was forecast as visual flight rules with the possibility of light snow showers en route. Several hours after mission completion, the forecast was expected to become instrument flight rules. Everything indicated it was a good day to fly.

I arrived several hours early to ensure all the paperwork, planning and details were taken care of. Even though the forecast was VFR throughout our time of flight, I decided to plan an IFR flight as well, just in case. The radar was making me second guess the forecast, and I didn't want to be unprepared should weather come in sooner than expected.

During the crew brief, I let everyone know for each leg of the flight what we'd do in the event weather didn't cooperate and our VFR flight turned into a day of instruments. I reiterated that we were not going to push the weather if it deteriorated. The IFR conditions were planned for and briefed; we could file IFR in flight if necessary.

After picking up our passengers, it wasn't long before I could see in the distance the "light" snow showers that were forecast — although they didn't look so light. The closer we got, the worse visibility became. The airport we were en route to was calling six miles visibility. In reality, however, that wasn't the case. This was the first indication that maybe the day wasn't going to be as smooth as I initially thought. We talked about filing IFR, but the cell was small, so we elected to fly north for a few minutes and then turn back on course.

When we landed at our first destination, I went straight to operations for a new weather brief. Just as before, they were calling for VFR conditions; however, the radar, Meteorological Terminal Aviation Routine Weather Report and Terminal Aerodrome Forecast for the next destination just weren't adding up. How could a cell just sitting over my next stop, and building, not be producing deteriorating weather?

After talking with our base ops, I made the decision to cancel the next stop and return home, even though on paper I had the weather to continue. After notifying the VIP, he cut his meeting short and we headed for home. On the way back, the cell we encountered earlier had become much bigger and darker. Although it wasn't in our flight path, it appeared to be building, eventually impacting our flight. Halfway home, operations sent a Blue Force Tracking message that weather at the stop I'd canceled (40 minutes north of base) was reported at 100-meter ceiling, quarter-mile visibility — nowhere close to my weather brief or TAF.

After dropping off our passengers, we had a 15-minute flight back to base. It appeared the weather was deteriorating in the last leg of our flight, even though at our current location there was no ceiling and unlimited visibility. Weather at home base was OK, but not great. Before takeoff, we discussed waiting to see what the weather was going to do, but we all wanted to get home. I decided to go ahead and give it a try. After all, it's only 15 minutes and the weather at our current location was perfect. How bad could it really get in just a few miles? If needed, we'd simply turn around or file IFR and shoot an instrument approach.

After takeoff, our great weather disappeared in the blink of an eye. Even though turning around or going IFR was briefed and discussed, the drive to get home became more powerful every mile we were closer to landing. As we pressed on, my CE continually called out where the good weather was if we needed to turn back, while my co-pilot and I vigilantly looked for the runway.

Finally, I'd had enough.

We were still barely VFR, and I decided I wasn't going to push it anymore when we had a good plan in place if we encountered this. I lifted my foot to press the floor mike and let everyone know we were turning around. Even though we were just a few miles from landing, it just wasn't worth it. At that very moment, a pocket opened and we had the visibility to make it the last few miles. Within 20 minutes after landing, the airfield went to nearly zero-zero.



ARMY STRONG.



KNOWLEDGE

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

As a young PC, I had to make several tough decisions, from telling the VIP I'm canceling a stop to multiple weather calls throughout the day. I learned a lot. Taking the time to plan for the worst before it shows up will help alleviate unwanted stress at critical moments. Although we never went IFR, we had a plan for it and everyone knew what to do. Ultimately, the decisions were up to me, but the entire crew's input was equally important. After all, if one member is uncomfortable, their mind won't be on the task at hand, which could be the difference in success or failure. Most importantly, I learned that no matter how close to home you may be, don't let that cloud your decision to make the right call.



ARMY STRONG.



U.S. ARMY COMBAT READINESS/SAFETY CENTER

JUST A SHORT RIDE

CHIEF WARRANT OFFICER 2 LAURIE ATHERHOLT
A Company, 2nd Battalion, 104th Aviation

It was a crisp fall evening, and I was getting ready to meet a friend for a long run through the streets of Arlington and Georgetown in preparation for an upcoming marathon. Rush hour was over, so I decided it was a perfect time to ride my motorcycle. I had been riding for eight years and brought my bike with me to every duty station, including Italy, so I felt ready to take on D.C. traffic. Plus, it was just a short ride.

Since moving to the area, I hadn't ventured out on my motorcycle more than a few times after observing the local traffic patterns and driving habits. It was common to see people shaving, applying makeup, talking on cellphones and even reading the newspaper while sitting behind the wheel in bumper-to-bumper traffic. Still, I thought a 15-mile ride on this beautiful evening would be a perfect way to end my hectic day at the Pentagon. I hopped on my cherry red Suzuki Bandit, which I had bought from my best friend's husband a year earlier, and headed out.

Within minutes, I was in the left lane on Interstate 395, giving generous distance to the cars in front of me. My self-imposed rules for riding in the D.C. area were to give merging traffic plenty of room (ride in the left lane if possible, while on multi-lane roads), give other vehicles more distance than I did while driving a car, make myself as visible as possible (my bike and jacket were red and my helmet was white with an added reflective strip) and keep my head on a swivel at all times. I thought that should be enough to keep me safe.

As I cruised up the interstate at 60 mph, I saw a spot of wet pavement in front of me. Some sections of the median had sprinklers installed to water the plants, which meant the road was always wet, even if it hadn't recently rained. Suddenly, I noticed red tail lights on the cars in all four lanes in front of me. I downshifted and began slowing down — from 50 to 40 and then 30 mph. The distance between me and the cars was closing fast, so I started applying the brakes. Then I realized that everyone on the highway had come to a sudden stop. Despite the eight-second cushion I had at 60 mph, I now did not have enough space to slow down without slamming on the brakes.

I braked hard and began skidding sideways on the wet pavement. My first thought was, "Don't panic. Just keep the bike upright and you'll be OK." Then I heard squealing tires behind me. I was able to keep my bike upright, but now I had to worry about the car behind me running over me. Fortunately, the car swerved into the lane to our right to avoid hitting me. Then, as quickly as it had stopped, traffic was once again moving at 60 mph (completely normal for D.C.). The whole ordeal lasted only a few seconds, but it was absolutely terrifying.

When I arrived at the meeting point, I couldn't stop shaking for several minutes. That was the last time I ever rode the bike at night. In fact, I decided D.C. traffic was more than I needed to tackle and sold the bike that spring to a young sailor. I made sure I told him about my scare and encouraged him to take a rider safety course.

So what could I have done differently that night? First, I could have taken my SUV instead of the motorcycle. I was familiar with D.C. roads and the traffic, but I also knew how unpredictable they were and how frequently people in D.C. drive distracted. Add to that the factor of driving at night, which can make it more difficult to distinguish distance and determine when traffic is stopped in front of you on the highway, and I should have resisted the temptation to "ride the wind" on that crisp fall night.

I also should have worn all available personal protective equipment. While I was wearing a full-face helmet; motorcycle jacket with protectors for the shoulders, elbows and knees; and gloves, I did not have any true PPE below the waist. I was wearing jeans and hiking boots. Even though I no longer own a motorcycle and only ride occasionally as a passenger, I now have riding pants. (I'll admit, however, that I should also own riding boots.)

For many years, a full-face helmet and riding gloves were the only pieces of motorcycle-specific gear I wore. I would ride in a denim or leather jacket, jeans and boots or running shoes. At the time, it was nearly impossible to find women's riding gear that was not: a) made for riding as a passenger on the back of a Harley; b) leather only, which is hot in the summer and offers no protective padding; and c) extremely expensive. I was living on a Ramen noodle budget, like many young riders, and couldn't



ARMY STRONG.



justify buying expensive gear that didn't suit my non-Harley motorcycle. Can you picture me on my old Honda Shadow in a Harley jacket and leather chaps? Hardly! Fortunately, today there are a lot more options for female riders looking for functional, well-fitting and cute (Hey, it's important to some of us!) gear.

Speaking of gear, I know some may think that motorcycle pants are only for people who ride on a track or during the winter, but they can help lessen your injuries if you ever lay down your bike on the asphalt. A few years ago, I was in a bicycle crash, which convinced me to purchase pants for my trips as a motorcycle passenger. I was traveling at little more than 20 mph on my bicycle when I hit the pavement. I was wearing normal cycling gear, which included a helmet, glasses, cycling clothes and fingerless gloves, and each piece saved me from more serious injury. However, I still walked away with a serious case of road rash all over my body and hands, bruised sternum, broken wrist, 12 stitches in my lip and a broken nose. I skidded across the pavement on my face before tumbling and coming to rest on my back, so my glasses — which were made specifically for cycling — protected my eyes from injury. I realized that if I were going much faster on a motorcycle wearing nothing but jeans and running shoes, I would surely have suffered some serious leg and foot injuries.

So what lessons can be gained from my experiences? First, I think there are some traffic conditions that are better tackled while protected by a steel cage. I know there are some riders who have no qualms about negotiating conditions like D.C. traffic. I, however, simply do not trust that other drivers will do the right thing behind the wheel. I have been in two fender benders while living in the D.C. area, both while in stop-and-go traffic. Both times, I was glad that I was hit while driving my car and not while on the bike. Even slow-speed accidents can cause serious injuries to a motorcyclist.

Second, even if you are on a Ramen budget, scrape together some pennies, go on eBay, check Craigslist — just do whatever it takes to buy a full protective ensemble for riding. It will protect you much better and you'll be warmer while riding in cooler weather. We all have suffered through a cold ride and it is not fun!

Finally, as hard as it may be, resist riding on days when you know there are other factors that might make the ride risky. Remember, the weather is not the only factor to consider when deciding to take the bike out for a spin.

I have to admit that I miss owning two-wheeled motorized transportation. Yes, I'm still riding the bicycle, but it's not the same. Currently, I am looking for a nice, used motorcycle to buy. Before I get back on the road, though, I'll ensure I've done everything I can to keep myself protected from whatever obstacles may be thrown my way.



ARMY STRONG.



STOPPING THE SILENT KILLER

STEPHEN MCCOMBS

U.S. Army Corps of Engineers, Los Angeles District
Los Angeles, Calif.

Do you have a carbon monoxide detector in your home? If you don't, you may want to consider purchasing one. Trust me, I speak from experience.

My family and I were snoozing away one chilly morning when we were awakened abruptly by a shrill noise. No, it wasn't my wife. (I am so dead when she reads this article). The annoyance was my carbon monoxide alarm sounding. Pulling myself out of bed, I noticed the house heating system was also on. I set the thermostat low, but the temperature had dropped enough during the night for it to engage. When it lit off, something went terribly wrong with the air and fuel mixture. It was running very rich and I could feel the heat coming through the door to the heater's closet. However, it wasn't the heat that concerned me. What got my attention was the reading on my CO detector's display panel.

Here's a quick science lesson: CO is an odorless, tasteless and colorless gas that is a by-product of incomplete combustion, especially from fossil fuels. Almost anything that burns gives off CO, and you won't know it's there. It can kill quickly if concentration levels are high enough. At 50 parts per million, most healthy adults get symptoms of CO poisoning — which include headache, nausea and vomiting — in the early stages of exposure. The higher the concentration, the quicker CO can render you unconscious and eventually lead to death.

Red blood cells carry oxygen around your body and there's a substance called hemoglobin that is part of these cells. Hemoglobin is what grabs oxygen molecules and moves them around your body. Hemoglobin attraction to CO is about 400 times greater than it is to oxygen. So when CO is present, hemoglobin will latch onto it instead of the oxygen. Your hemoglobin molecules can't carry enough oxygen to keep you alive. All the while, you're unaware because you cannot smell, taste or see it. Thus, CO is dubbed the silent killer.

How do you stop a silent killer? Noise works quite well. When my CO alarm went off, the reading was 289 PPM and rising. Without an alarm, there's a good chance my family and I would've died.

Eventually, the malfunctioning heater would have caused a fire and the smoke alarms would have activated. But if we were all unconscious from CO poisoning, we wouldn't have heard them.

Fortunately, we did hear the CO alarm and got out of the house in time. I turned off the heater and turned on our whole-house exhaust fan as we left. None of us had CO poisoning symptoms and went back inside 30 minutes later. This incident is exactly why I purchased a CO detector and it's why you should too.

I cannot officially endorse any product, but if you're in the market for a CO detector, I suggest getting one that operates by electrical plug and battery backup. I purchased mine at a large home-improvement center for less than \$50. That's a small price to pay to save an entire family from a premature death, right? You bet it is.

FYI

Additional information about carbon monoxide poisoning can be found on the Centers for Disease Control and Prevention website at <http://www.cdc.gov/co/>.



ARMY STRONG.



WHO'S IN CHARGE?

CHIEF WARRANT OFFICER 2 IAN GEISSLER
Bravo Company, 1st Special Troops Battalion
1st Brigade Combat Team, 101st Airborne Division (AASLT)
Fort Campbell, Ky.

Unmanned aircraft systems have many built-in procedural safety checks similar to manned aviation, such as system limitations, environmental factors and airspace deconfliction methods. These procedures are in place to ensure the safety of the aircraft and aircrew operating in the same area of operations. But conducting flight operations in and around the busiest tactical airfield in eastern Afghanistan presents a complex and dynamic airspace in which to fly. Pilots must contend with opening and closing of restricted operating zones, quickly changing weather, low visibility and congested traffic patterns — each of which have their own procedures defined to mitigate risks. So what happens when the procedures conflict? Which procedure takes priority over another? Who is authorized to make the decision?

I was a UAS technician in a brigade tactical operations center, acting as the mission coordinator for Shadow operations. We were about two hours into a routine counter indirect fire mission that was 45 minutes away from our launch and recovery site. We received a message over multiuser internet relay chat from our weather operations that other pilots were reporting a sand and windstorm heading toward our LRS that would be over it in about an hour and a half.

According to our flight procedures, our aircraft must be on the ground one hour prior to forecasted weather that exceeds either our aircraft limits or the controlling ground equipment system limits. Even though the area we were flying in was well away from the sandstorm, we were required to return to base because the high winds could damage the antenna controlling the aircraft. We began weather scans as we were flying back to base and observed the sandstorm approaching from the north. It was about 100 feet tall, moving fast and heading right toward the LRS. Fortunately, it was still far enough away to give us time to make it to the deck safely.

Ten minutes out, we contacted air traffic control and requested a direct approach to the runway for immediate landing at the Shadow LRS. ATC informed us that brigade headquarters and headquarters company had their demolition restricted operating zone hot at the inbound end of the runway.

Now, I don't know who came up with the idea of putting the unexploded ordinance demolition range 100 feet from the flight line and hot refuel pads. I also don't know why their ROZ dimensions needed to have a radius of five miles and go to 20,000 feet altitude. Their ROZ would shut down air operations in the entire area. If we were to fly over the range while on final approach and they detonated UXO, we would risk damaging the aircraft. I contacted HHC ops on MIRC and asked them if we could enter the ROZ or if they could go cold until we landed. HHC told me that they didn't have communications with the guys at the range and couldn't help us.

We scanned the range with our optics and did see activity. We continued to try and get communications with the range personnel and HHC to confirm that they were cold, while we watched as the wall of sand approached the airfield. After 10 minutes of trying to get clearance, HHC told us that they didn't mind if we flew over but it would be at our own risk. After assessing the risk between the potential of overflying the UXO range or the inbound sandstorm, I decided to get approval from ATC to do a final approach from the opposite end of the flight line.

ATC approved the approach and we began to transition to the other side of the runway. We watched the sandstorm approach, realizing it would be close now due to the wasted time spent trying to mitigate the UXO ROZ. The crosswinds were beginning to pick up and the aircraft was crabbing badly, but it was still within landing tolerances.

When landing, there is a decision point on final approach when the aircraft is 50 feet above the ground. After the aircraft is past that point, it can no longer be waived off and is controlled by automation. Our aircraft continued on final approach and was nearing the DP. Everything was within system limitations and we committed to the landing with the wall of sand only a few minutes away. The aircraft passed the DP and continued along its glide slope, descending to 20 feet above ground level at the end of the runway.



ARMY STRONG.



KNOWLEDGE

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

During the landing sequence, a gust of wind hit the aircraft, creating enough turbulence to fool the onboard accelerometer into thinking that the aircraft had touched down. The aircraft software, sensing the aircraft was on the ground, cut the engine while it was still 20 feet in the air. It landed hard at the end of the runway and caused significant damage to the landing gear and payload. The aircraft was repaired and back in service by the next day, but the procedures in place took longer to correct.

I learned to not delay making command decisions over the aircraft when real danger from one procedure outweighs another procedure. In the end, the event forced changes that made the airfield safer for everyone.



ARMY STRONG.



U.S. ARMY COMBAT READINESS/SAFETY CENTER

SNOW JOB

CHIEF WARRANT OFFICER 3 MATTHEW METCALF
Warrant Officer Career College
Fort Rucker, Ala.

Several winters ago, I crashed my car into a guardrail on a desolate strip of road in northern New York. I am not proud of my actions leading up to that day. This accident could have been prevented, however, with my integrity and leader involvement.

My unit, like any other, conducted vehicle inspections prior to long weekends and block leave. The platoon sergeant informed us that he would be conducting vehicle inspections and had us fill out the heading information on our inspection sheet. I filled in minimal data and left the rest of the sheet blank. I would complete the rest of it the next morning. The reason? Well, on that particular day, I drove a red 1996 Chevy Beretta to work. There was no way I was going to let my boss inspect it because I knew it would never pass. What's more, I didn't have the money to repair all the things wrong with it. The car had four bald tires, the brakes were worn and it did not have all the required safety gear for the Fort Drum winter.

I left work that day with a plan. When I returned the following morning, I was driving my wife's 1997 Ford Expedition. This vehicle had all the bells and whistles. In addition, it had four new Bridgestone tires and snow chains in the back. I filled out all the remaining information on the sheet and had the Expedition inspected. I had no doubt it would pass, and it did.

The next morning, I returned to work driving the Beretta, excited for the four-day weekend. It was a normal January day with snow in the forecast. Everyone was keeping an eye on a big storm heading our way while getting the day's work done. Just before lunch, the snow began to fall and all nonessential personnel were told to head home. I was in the middle of a project and informed my platoon sergeant that I would be on the road shortly. An hour later, I left the office and walked outside into a winter wonderland.

When I got to my car in the parking lot, I started removing the snow using my hands because I didn't have an ice scraper. I then cranked it and turned the defroster on high until all the ice melted. Satisfied that my vision wouldn't be impaired, I hit the road. My house was 40 minutes north in Gouverneur, N.Y., but I knew today's commute was going to be much longer. I struggled through the blinding snow for 20 minutes, trying to keep the Beretta's bald tires on the road. Then I lost control.

The car seemed to have a mind of its own and barreled into a guardrail, breaking the axle. The car finally came to rest in a small ditch on the side on the road. Of course, there were no other vehicles on the road, and I didn't have a phone or a plan. With my options limited, I walked about a half-mile until I reached a small house, where I called for help. I waited there for six hours until help arrived.

I learned a lot that day. I was ashamed that I did not have the money to repair my car and was afraid of what my platoon sergeant would say. I knew it was wrong, but I threw safety out the window to save face. In hindsight, this accident has made me a better leader. I remember how I felt back then and make it a point to get to know my Soldiers. As leaders, we are always enforcing the standard, but we can't become complacent and make it a check-the-block activity, especially when it comes to safety. If my platoon sergeant knew what car I drove to work every day, I probably wouldn't have been able to get away with switching vehicles for the inspection. Also, implementing a no-notice vehicle inspection program would have uncovered my vehicle's deficiencies and kept me from driving my car that day.

Again, I am not proud of what I did. My actions that day had a very negative reaction. I am lucky it wasn't worse.



ARMY STRONG.



COLD WEATHER BITES

PATRICIA RABAGO

Excitedly, I boarded a bus bound for Bridgeport, Calif. I was on my way to cold weather medicine training, and as a hospital corpsman stationed with the Marines, I knew this school would significantly enhance my capabilities. The air felt a little thinner as I stepped off the bus and saw snow-covered mountains in the distance.

After a morning of in-processing, my classmates and I received our cold weather gear. Most might assume there's not much to this type of gear, but we received more than just boots, jackets and gloves. We were issued cool equipment like cross-country skis and special sunglasses. The instructors gave us a class on how to use the equipment and why these items were important. They also covered acclimatization, cold weather injuries and shelters. Finally, we were ready to head up the mountain for field training.

As I packed, I remembered the instructors telling us that our gear was expensive and if we lost any of it, we'd be responsible for the cost. I didn't have a lot of money at the time, so I decided to not take the special sunglasses. Instead, I brought my cheap personal sunglasses. I'd later discover that was a bad idea.

The first day on the mountain, we learned how to maneuver in the snow and build a shelter. During the first exercise, I wore the gloves I was issued, but my hands became painfully frozen after manipulating snow all day. I spoke up and an instructor gave me a pair of mittens. It turns out that I had a mild case of frostbite, but I charged on anyhow.

Day two was equally busy as we prepared for a mass-casualty exercise. For some reason — maybe because it was cold — I subconsciously disregarded the class we had on hydration and didn't drink enough water. I paid for that bad decision and was dizzy and nauseated by nightfall. Dehydrated, I carefully replenished my fluids for the remainder of the evening. I was determined to not be sent home!

I was feeling better the next day as we headed farther up the mountain. The ride up was fun, as we held onto a rope that was attached to a snowmobile; however, we were expected to get down the hill on our own. It was a great day of training but my eyes were burning and sensitive to light by the time we finished. I found an instructor and reported my condition. He sat me in a tent to rest and recover from snow blindness.

Luckily, I recuperated from my cold weather injuries and graduated from the class. In hindsight, I believe those injuries have actually helped me throughout my career. From personal experience, I know what to look for in potential cold weather injury patients.

Before you head out into cold weather, either tactically or for recreation, take appropriate precautions. It doesn't take a lot of exposure to the elements to take you out of commission. Trust me, I've been there and done that!

FYI

Visit the U.S. Army Public Health Command, <http://phc.amedd.army.mil>, for more information about cold weather injury prevention. Additional information can be found in TB MED 508, Prevention and Management of Cold-Weather Injuries.



ARMY STRONG.



CREW MIX-UP

CHIEF WARRANT OFFICER 2 BERNARD HIGDON
B Troop, 6-17 Cavalry Regiment
Fort Wainwright, Alaska

While deployed to Camp Taji, Iraq, with Blackfoot Troop, 6th Squadron, 17th Cavalry Regiment, as an OH-58D pilot, our troop was tasked with conducting different missions in Baghdad, Balad, Ramadi, Al Asad and areas in between. Flight crews would show up about the same time before their missions to ensure the paperwork was completed and there weren't any changes to the schedule. Changes to the flight schedule were a common occurrence during our deployment due to pilots getting hurt, sick, tasked with other duties or just running out of duty day. You could bet there would be at least two to three name changes per week.

On this particular day, I was on the night shift, scheduled to fly right seat trail with one of our troop instructor pilots who was the air mission commander for the flight. Both of us had been flying in the AO for at least six months and were very familiar with the area. Our lead ship was crewed with one of the squadron's staff aviators — who was the pilot-in-command, call sign "Dakota" — flying right seat and one of our new platoon leaders in the left seat. Both had been flying in the AO for some time, but not with each other.

We received our S-2 briefing, and the AMC conducted a thorough team brief. As the norm, lead would communicate with all air traffic controllers and ground units and trail would communicate with Baghdad radio and higher commands. Prior to our takeoff, I had some doubt in my mind about the crew mix for our flight. Even though the staff aviator had several thousand hours in the OH-58D, the majority of the knowledge for the AO was in the trail aircraft. However, I figured that since the AMC was OK with the crew mix, then I would be as well.

We completed the first of three missions for the night and all was well. We then decided to conduct refueling operations at Baghdad International Airport so we could get maximum station time for the next mission. To get to BIAP from the southeast of Baghdad, we had to fly through three different controlled airspace: Embassy, Liberty and BIAP. All had different control points for ingress/egress; however, the AMC wanted to keep it simple and fly around them. We were briefed that a team of AH-64s would be working the south/southwest area of BIAP, which made sense because approaching from the north via "Dakota CP" would allow for airspace separation and deconfliction.

En route to BIAP, I noticed we were taking a different route than what I usually took to maintain flight outside of the different controlled airspaces. I brought it up to the AMC, who must have been reading my mind, because he had jumped on the radio and asked lead where they were going. A few seconds passed and, due to our location, lead requested to enter BIAP from the east. The only way to do so required a transition from 1,200 feet mean sea level altitude that would allow us to fly over the civilian side of the airport without affecting traffic. We were currently flying in Liberty airspace at about 700 feet AGL. The AMC granted the request and lead initiated the climb.

I initiated my climb and watched Liberty to ensure no other aircraft were departing the airspace. At the same time, the AMC was looking to the left to see if he could find the AH-64s that were flying to the south of BIAP. Once I looked back to the front, I was in shock. I had an Apache, no more than a few rotor disks away, conducting a dive and banking right in front of me. I immediately pulled more power and banked to the left, hoping the other Apache was not flying nearby. Lucky for us, it was not. We continued with the transition and the AMC had a long talk with the PC of our lead aircraft.

The rest of the night was uneventful. We completed our missions and returned to Camp Taji. After debrief and a thorough team after-action review, we decided to get in contact with the AH-64 pilots to find out what happened and how we had a near midair accident. After talking with them, we found out there were multiple mistakes made that could have been costly.

The AH-64 pilots had completed their mission and were conducting reconnaissance in an area that was different from what was in the S-2 brief. There was also confusion when our lead aircraft requested to conduct the transition into BIAP using his "Dakota" call sign. The AH-64 pilots assumed we were entering from the "Dakota CP" from the north, which we had originally planned to do, and not entering from the southeast. Due to the overlapping airspace of BIAP and Liberty, both flights were switching between ATCs and didn't hear, see or realize what the other team was doing.



ARMY STRONG.



KNOWLEDGE

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

When all was said and done, I felt the biggest mistake happened before takeoff. With the majority of the experience being in the trail aircraft, that meant the possibility of task saturation for the PC of the lead aircraft. There could have been at least four lives lost and two aircraft destroyed that night, plus possible civilian casualties on the ground. Crew mix plays a big part of flight planning and should never be taken lightly.



ARMY STRONG.



U.S. ARMY COMBAT READINESS/SAFETY CENTER

OUT THE DOOR

MASTER SGT. WANDA L. KAHL
Operational Support Airlift Agency
Fort Belvoir, Va.

Picture this: You live on a farm in North Dakota, the temperature outside is just 7 F and the ground is covered in snow. You're in the house hanging out with about eight family members (mom, dad, cousins, aunts and uncles) when one of your friends calls and asks you to come into town for a little while. You tell everyone goodbye and head outside only to find somebody has blocked in your vehicle. A "normal" person probably would either get the owner to move the car or move it himself. But we're talking about my family, and they are anything but normal. Here's our story.

My mom and I were visiting my aunt and uncle, who live on a farm 30 minutes away from any sort of civilization. My cousin, who we'll call Joe, needed to head into town, but two cars had blocked him in the driveway. My cousin, Naomi, gave Joe the keys to both cars so he could move them. This is where the trouble started.

For as long as I could remember, Joe had a bad habit of leaving the door open and leaning halfway out when backing up a vehicle. We all told him this was dangerous and that one day his luck was going to run out. I'm guessing by now you have a pretty good idea where I'm going with this.

Joe had to walk through about two feet of snow to get to the cars. After successfully moving the other two vehicles, he jumped into his truck. As he backed up, the snow stuck on the bottom of his boots started melting, which made the pedals slick. Suddenly, his foot slipped off the gas pedal and got caught between it and the brake pedal. While he focused on getting his foot unstuck, he lost his balance and fell out of the truck with his foot still halfway on the gas. The truck continued to travel backward — with Joe's head dragging along the ground — and no one around to stop it! Eventually, the truck hit a building and came to a stop.

Back inside the house, my mom, aunt, uncle, cousins and I continued our visit, unaware of what was going on outside. After about 20 minutes, my aunt finally asked, "What happened to Joe?" Naomi went outside to check on him and saw the truck smashed against the building and Joe hanging out the door unconscious. Naomi ran back to the house to tell us what had happened. As I called 911, my aunt tried to revive Joe, but he was unresponsive. By the time the ambulance arrived, Joe was still out. The emergency personnel loaded him into the back of the ambulance and took him to the hospital, which was nearly an hour drive.

At the hospital, doctors diagnosed Joe with a broken neck and back and rushed him into surgery. Fortunately, the surgery was a success, but Joe faced a long and painful physical rehab ahead. His right arm was also badly injured, and the doctors were unsure if he would even regain feeling in his hand. Despite the severity of his injuries, they told him he must have had a guardian angel watching over him. Because of the length and the speed that he was dragged, he should have been dead.

Three years later, after many months of physical therapy, Joe is officially healed. He does not have all the feeling back in his right hand, but he did regain about 95 percent of it, which is better than doctors expected. This accident was one of the scariest things I have ever experienced, but it brought our family closer. We all learned life is too short and that we need to embrace it, taking nothing for granted. I am thankful to say that Joe also learned his lesson and quit backing up vehicles with the door open.



ARMY STRONG.



ON SHAKY GROUND

ALLEN MOORE

Installation Safety Office
Fort Hunter Liggett, Calif.

When folks think of hazardous weather during wintertime, they probably envision snow and ice-related storms. That's not the case for my family and me. We witnessed a very different type of weather phenomenon in December 2003 — the San Simeon earthquake.

My son and I were on an afternoon motorcycle ride on the back roads to Fort Hunter Liggett, Calif., just north of Paso Robles. We were following each other and had just gone into a right-hand sweeper when my motorcycle inexplicably jumped off the road. I was able to maintain control, but it felt like the bike had two flat tires. I pulled off to the shoulder to check on my son and was relieved to see him safe about 500 yards behind me. Like I, he was checking over his bike, trying to determine what had happened. Nothing appeared to be wrong with either motorcycle, so we decided to continue our ride.

We saw a lot of debris along the road, and I deduced that we had experienced an earthquake. At Fort Hunter Liggett, the gate guards confirmed my theory. (We'd later learn that the 6.5-magnitude quake caused major damage throughout the central coast of California and killed two people.) We made our way to my wife's office and, thankfully, she was OK. I then tried to call my father, who was at home when the earthquake hit, but the lines were busy. As I drove to his house, I feared the worst.

The outside of the house seemed fine; however, as I walked through the front door, everything wasn't as rosy. My father was safe, but the interior of the house was in shambles. I immediately turned off the gas and water. Surveying the house, I saw an array of broken televisions, dishes and wall decorations. Luckily, the house didn't sustain any major structural damage and, best of all, my family was safe.

Afterward, I realized how ill prepared we were for an earthquake. If we lost electricity, heat and water, what would we have done? How would we keep food cold? What if we'd been injured?

Hazards are all around us and come in many forms. Mother Nature has a whole slew of natural disasters she can throw at us, from earthquakes and hurricanes to tornadoes and floods. While there is no preventing these disasters, we can somewhat minimize the after effects by being prepared. The following actions, courtesy of ready.gov, can help protect you, your family and your property in the event of an earthquake.

- Build an emergency kit and make a family communication plan.
- Fasten shelves securely to walls.
- Place large or heavy objects on lower shelves.
- Store breakable items such as bottled foods, glass and china in low, closed cabinets with latches.
- Fasten heavy items such as pictures and mirrors securely to walls and away from beds, couches and anywhere people sit.
- Brace overhead light fixtures and top-heavy objects.
- Repair defective electrical wiring and leaky gas connections. These are potential fire risks. Get appropriate professional help. Do not work with gas or electrical lines yourself.
- Install flexible pipe to avoid gas or water leaks. Flexible pipes are more resistant to breakage.
- Secure your water heater, furnace and gas appliances by strapping them to the wall studs and bolting to the floor. If recommended by your gas company, have an automatic gas shutoff valve that is triggered by strong vibrations installed.



ARMY STRONG.



- Repair any deep cracks in ceilings or foundations. Get expert advice if there are signs of structural defects.
- Be sure the residence is firmly anchored to its foundation.
- Store weed killers, pesticides and flammable products securely in closed cabinets with latches and on bottom shelves.
- Locate safe spots in each room under a sturdy table or against an inside wall. Reinforce this information by moving to these places during each drill.
- Hold earthquake drills with your family members: Drop, cover and hold on.

All 50 states and five U.S. territories are at some risk for earthquakes. Earthquakes can happen at any time of the year. My experience put things into perspective. I decided I would be prepared for the next disaster. How about you?

FYI

For more information on earthquake preparedness, visit <http://www.ready.gov/earthquakes>.



ARMY STRONG.



WAITING FOR THE CALL

CHIEF WARRANT OFFICER 2 RICHARD COOPER

The air ambulance business can be challenging, but it's absolutely necessary. Sometimes I feel it doesn't receive the recognition it deserves. Nevertheless, I hope to never have to fly a medevac mission because that means one of our own or an ally is a casualty. Unfortunately, casualties are a part of war, and the following story chronicles one of my experiences in Iraq in 2010.

It was a hot summer day and I was on a 48-hour medevac duty as the pilot of a four-man crew that also included a pilot in command, medic and crew chief. We had already completed our morning aircraft run-up and checks. Also, we conducted our morning crew mission briefs for the duty day. When on-duty in a ready-up status, the No. 1 priority for the crew is to be rested. There is no set schedule of when Soldiers could get hurt, so the crew has to be diligent in being rested and ready at all times day or night.

After our crew finished the aircraft run-up and checks, which are to be completed every morning, I decided to go to my room and take a nap. It was rare to receive urgent medevac missions, so many times I would take off my uniform top, kick off my boots and relax or nap if needed. But today, for some reason, I chose to fall asleep in my full uniform.

It was about noon and I was deep into a nap when the call came on my handheld radio — "Medevac, medevac, medevac!" It immediately woke me and I jumped up, grabbed the radio, ran out to our aircraft and strapped in to start going through the checklist all the way to engine start. The crew chief met me at the aircraft to prepare the cabin for the mission. The PC and medic ran to flight operations to receive the mission information.

As I was going through the checklist, I radioed into flight operations and requested the grid coordinates for the injury and input them into the aircraft's GPS. The PC and medic finished the flight operations briefing and ran to the aircraft and strapped in. We then finished the start-up procedures and lifted off. Our Black Hawk was wheels-up in less than eight minutes. What a rush to come out of sleep to taking off less than eight minutes later on an urgent mission.

We flew toward where the GPS was pointing, and I coordinated with the PC to double-check that I input the correct grid coordinates. The PC and I then coordinated. I would fly and he would navigate the leg to the point of injury, and vice versa on the leg back to the hospital on the base. The information we had at the time was that the point of injury was a convoy on a highway in the middle of nowhere. Also, the convoy had secured the area and we were told to look for and land at the green smoke. With my inexperience, I figured it would be fairly easy to identify the landing zone, but I had a hard time interpreting what was on the ground from altitude. With the PC's help, I saw the green smoke and the LZ came into sight.

Experience has shown us that a major concern for all desert landings is browning out in the dust. The PC and I briefed the element of dust on the landing and I initiated the approach. We were landing on an asphalt highway, so I assumed the dust wouldn't be too bad. I was mistaken; we completely browned out! I could barely maintain a piece of the road through my chin bubble. It was a very intimidating moment for me, but, thanks to good unit pre-deployment training, I landed the aircraft without any issues. To my surprise, it was one of the smoothest, softest landings I've had to date! It's interesting how your best performance can prevail in the heat of the moment.

After landing, the medic and crew chief exited the aircraft and performed their duties to receive and secure the patient inside the cabin. We flew back to base and handed off the patient to the medical team. The injured individual was an Iraqi national contractor who was driving a vehicle that was towing an M93A1 Fox (a chemical, biological, radiological and nuclear reconnaissance vehicle) on a trailer with a Mercedes cab. Apparently, this individual was distracted and drove into the back of the semi-trailer in front of him. The impact severed both of his legs near the knees and caused other injuries. A former British special forces soldier trained as a combat medic was the first responder on the ground caring for this patient. I believe his excellence in packaging the casualty for medevac saved the man's life.

One lesson learned from this was to never be complacent. Even when op-tempo is slow, be prepared for the worst. I was sleeping when this call came through, which is fine, but it was noon and I was tired from staying up late the night before doing personal non-mission-related activities. Also, I learned to approach every potential dust landing as a brownout. As I've stated, the mission went well, but I could have been better rested and mentally prepared, which would mitigate the potential for any mishaps.



ARMY STRONG.



ACCIDENT BRIEFS

AVIATION

UAV

MQ-1C

Class A

The aircraft was about 2.5 hours into flight when the crew experienced low manifold pressure and indication of an engine failure. During an attempt to return to base, the aircraft lost altitude and struck a ridge. The system was recovered, but total destruction was reported.

UH-60M

Class B

The aircraft touched down on an upslope. All four main rotor blades made contact with the slope. The crew raised the aircraft and repositioned it 30 feet away before returning to the forward operating base without further incident.

GROUND

PERSONNEL INJURY

Class A

A Soldier was killed during an on-duty airborne jump when his parachute reportedly failed to fully deploy and he struck the ground.

A Soldier died after being struck by a train. Alcohol use was reported.

A Soldier drowned while swimming back to shore with another Soldier.

A Soldier was killed when his personal airplane lost power and crashed.

DRIVING

PMV-4

Class A

A Soldier was killed when his vehicle crossed the centerline and collided with another vehicle. At the time of the accident, the Soldier was driving another Soldier to a medical appointment.

A Soldier was struck and killed by a vehicle as she waited outside her car for assistance for a flat tire.

A Soldier died when he lost control of his vehicle, reportedly at a high rate of speed, and struck a tree.

A Soldier was killed when he ran off an interstate and struck a barrier, causing his vehicle to burst into flames.

PMV-2

Class A

A Soldier was killed in a hit-an-run accident.

A Soldier and his wife were killed when their motorcycle struck the rear end of a van at an intersection.

A Soldier was killed when his motorcycle overturned after a jump on a dirt bike trail. The Soldier was wearing his full personal protective equipment.

A Soldier was killed when he lost control of his motorcycle on an access ramp and struck a concrete barrier.

A Soldier died when failed to negotiate a curve while traveling at a high rate of speed, lost control, fell off the motorcycle and struck a guardrail. The Soldier was a motorcycle mentor.

